

Updating Output Emission Limitations Workgroup

Conference Call

Thursday, February 18, 1999

Time: 1:00 PM - 3:00 PM Eastern time

I. Introductions

- Margaret Sheppard, EPA, began the meeting by having participants identify themselves.
- Ms. Sheppard explained the background of the group to Lisa Jaeger and Bob Bessette of the Council of Industrial Boiler Owners (CIBO). Ms. Sheppard said that, like the electric output discussion at the first meeting, she would like to talk about including steam/thermal output in the guidance to states. She stated that it is wrong to assume that steam measurement is the same at industrial boilers and electric generators. Mr. Bessette mentioned that CIBO has ongoing litigation, so he will not be able to discuss the issue in too much detail.
- He then asked about the time frame for the guidance, and Ms. Sheppard said an internal time frame would be a draft proposal by spring or summer of this year and a final rulemaking in 2000.

III. Goals for Next Meeting

- Hopes were to discuss the policy issues of input versus output based guidance, but Ms. Sheppard referred to Larry Kertcher's e-mail which noted that EPA's legal counsel advised him that the workgroup cannot have a meeting or conference call on these issues involved in the current rulemaking.
- Issues that can be discussed involve measurement, specifically for industrial boilers. Ms. Sheppard mentioned that the issue papers about electricity measurement presented at the last meeting were very helpful and a similar exercise for steam measurement in cogeneration and industrial boilers should be the next step.

III. Issue to Discuss

- Ms. Sheppard noted that Issue 4 on the steam measurement handout, *Appropriateness of Comparing and Converting Steam and Electric Output*, had been discussed at the last meeting, but more ground is left to be covered.
- She stated that Issue 2, *Net vs. Gross Steam Output*, might be simple to answer or not. Industrial processes use steam internally, not generally for sale. If it is common not to measure the steam on a net basis, maybe net steam measurement does not make sense for output for industrial boilers. Marc Cohen of Massachusetts asked if the group has defined useful steam output. Ms. Sheppard replied no and questioned if it makes sense to measure sales of steam. Mr. Cohen answered that it is relevant since commercial use is a subset of total steam use. Mr. Bessette commented that people do sell steam by the pound or ton like electricity is sold by kWh. He explained that good output numbers can be attained if the steam source is 100% condensing or 100% noncondensing (such as cogen), but difficulties arise when the percent is somewhere in between, and there is diversity across industry.
- Ms. Sheppard commented that if it is difficult for industry to measure, it will be more difficult for the group participants to determine net steam output.

- Mr. Cohen asked if other states have boiler units for district heating, and Mr. Bessette mentioned San Francisco Thermal Operation, which is 100% district heating and no electricity (and is not part of the SIP) and Trigen in downtown Baltimore.
- Ms. Sheppard asked for volunteers to respond to one or more of the issues; no one is expected to answer them all. Length may range from one word to two pages or more.
- Mark Hall, Trigen, offered to cover steam measurement equipment issues for district heating and cogen.
- Mr. Bessette stated that CIBO could come up with a 1-2 line answer for most of the questions on the list to set the basis for what is not known and could get its members to help. He asked to receive copies of papers from the last meeting, which Ms. Sheppard said she would e-mail to him as soon as the minutes are ready. She added that they will be posted on the group's website as well.
- Arthur Lee of Texaco said he could answer one or two questions on steam measurement and would work with Mr. Bessette on his answers.
- Joel Bluestein, Coalition for Gas-Based Environmental Solutions, asked for clarification on the third question of Issue 2, "How would an industrial plant determine or measure net output for a unit?" Ms. Sheppard explained that the advantage with using net output is the connection of the price of more efficient electric generation with the price of steam. Mr. Bluestein gave an analagous situation of onsite generation of electricity at an industrial facility in which all the electricity is used to meet demand. Mr. Bessette said he would talk with Mr. Bluestein about the issue.
- Ms. Sheppard said that Mark Spurr, International District Energy Association, said he would help write a paper on Issue 4.
- Mr. Bessette asked where the lines of the box are drawn (steam drives or electric motors) and how the value of steam is assessed for a motor. He asked if it is based on the efficiency of the motor? The answer is not clear cut. Ms. Sheppard noted the possibility of EPA providing guidance with allocations for industrial boilers based on heat input. Mr. Bessette mentioned that New York is in the process of looking at Btus allocated for steam, which is easy for turbines. Ms. Sheppard said that that issue was discussed at the last meeting and she would provide Mr. Bessette with the minutes.
- Mr. Cohen asked if going from direct measurement for cogen to heat rates for different electric generating systems had been discussed. Ms. Sheppard answered that the issue had been raised but was not thought to be a good option. The group preference is direct measurement. John Preczewski, New Jersey DEP, asserted that that is not every state's preference, and mentioned that New Jersey does not prefer direct measurement. Mr. Bluestein stated that the issue has two contexts: 1) For measuring output from scratch for a system, measure directly. 2) If already existing, use what is available: heat rate, engineering estimate. Mr. Cohen mentioned that he is in the process of establishing a standard for steam/hr, similar to MWh, and it has to be finalized in September, but he is staying away from rulemaking on it.
- Ms. Sheppard expressed the usefulness of this group as a forum for EPA and the participants to learn about normalizing output based measures. She requested that states share some of their experiences. Mr. Cohen agreed that that would be useful but questioned how much states could

disclose since, in his case, he is close to drafting regulation. Ms. Sheppard replied that states should talk to their legal counsel to figure out constraints and that she would like to meet with just the state representatives. She added that it may help for EPA to come out with a draft proposal to the group to hear states' reactions.

III. Next Steps

- Ms. Sheppard felt it would be good to get two meetings in before the end of April, one about policy, which could not be discussed at the current time. The group agreed on March 25 as the date of the next meeting to be held in Washington, DC. She asked for people to submit papers by March 12.
- She asked if it would be acceptable to group members to put the list of workgroup participants on the webpage, and the group agreed that putting name and affiliation would be sufficient. Contact information will be sent to the group separately.
- She listed possible future discussion topics as the EPA's draft proposal, scheduled to be out in May, questions from states, information sharing from states in a public forum, and issues with disclosure.

Conference Call Participants

Government—Federal and State

Margaret Sheppard, EPA/Acid Rain Division

Sarah Dunham, EPA/Acid Rain Division

Mary Jo Krolewski, EPA/Acid Rain Division

Dwight Alpern, EPA/Acid Rain Division

Jean Vernet, Department of Energy

Robert Sliwinski, New York Division of Air Resources

Joe Bryson, EPA/Atmospheric Pollution Prevention Division

Arthur Diem, New Jersey Department of Energy

John Preczewski, New Jersey DEP

Joe Fontaine, New Hampshire

Marc Cohen, Massachusetts

Utility/Electric Power Industry

Louis Pocalujka, Consumers Energy

Mike Jirousek, FirstEnergy

Mark Brownstein, Public Service Electric and Gas Company

Mark Hall, Trigen Energy Corporation

Other Industry

Joel Bluestein, Coalition for Gas-Based Environmental Solutions

Debra Jezouit, Baker & Botts for Reliant Energy

Arthur Lee, Texaco

Rob Stavins, Harvard University

Lisa Jaeger and Bob Bessette, Council of Industrial Boiler Owners (CIBO)